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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,901	02/08/2002	Tsutomu Totani	181A 3232	2267

7590 06/03/2004  
KODA & ANDROLIA  
2029 Century Park East, Suite 1430  
Los Angeles, CA 90067-3024

EXAMINER

MICHALSKI, JUSTIN I

ART UNIT PAPER NUMBER

2644

DATE MAILED: 06/03/2004

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/071,901

Applicant(s)

TOTANI ET AL.

Examiner

Justin Michalski

Art Unit

2644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

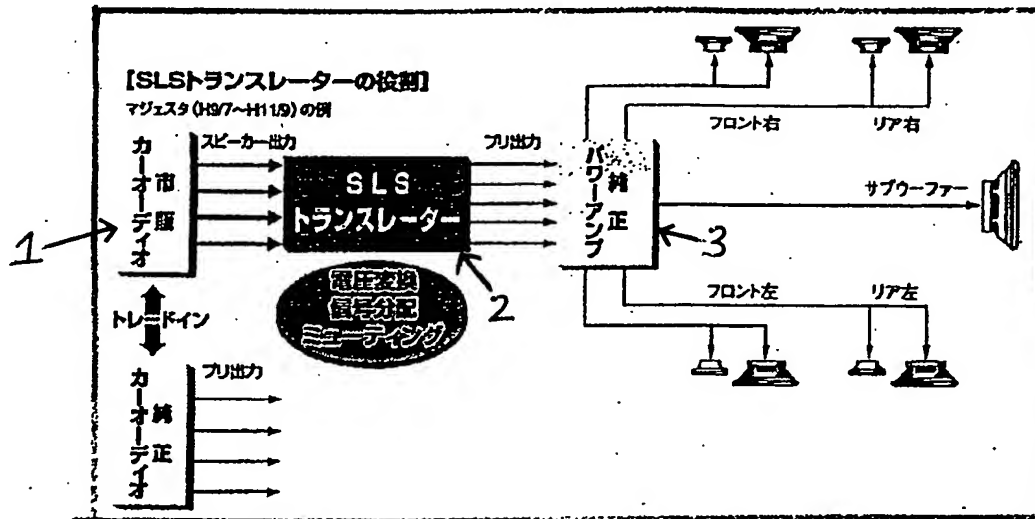
1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kanack Planning Corporation ("Kanatech/Amenity Car Life by Knack Technology", October 2000, pages 2-6). Kanack Planning Corporation discloses an audio adapter (Page 2, shown below on page 3 of this action with inserted reference numbers, adapter 2) used with a vehicle audio system including a power amplifier (amplifier 3), a head unit serving as a tuner (head unit 1), and a plurality of loudspeakers provided in a vehicle compartment (speakers shown), the audio adapter comprising a transformer (IDS paper #6 discloses a "translator" for voltage conversion, i.e. transformer 2) (paragraph bridging pages 1 and 2) provided for every one channel between a non-genuine head unit and the power amplifier (Figure discloses four channels from head unit (1) to amplifier (3) through transformer (2)) when the head unit is replaced by the non-genuine head unit (IDS paper #6 discloses non-genuine head) (Paragraph bridging pages 1 and 2), the transformer matching an output impedance with an input impedance between the non-genuine head unit and the power amplifier, the transformer adjusting an output level of

the non-genuine head unit to an input level of the power amplifier (IDS paper #6 discloses output level of a non-genuine head and input level of a genuine power amplifier are matched).



**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanack Planning Corporation as applied to claim 1 above, and further in view of Kim (US Patent 5,327,505).

Regarding Claim 2, Kanack Planning Corporation discloses an adapter as stated above apropos of claim 1 but does not disclose windings generating a center and woofer signal. IDS paper #6 discloses that the "translator" (i.e. transformer) is used to control the four loudspeakers associated with it. Kim also discloses an audio apparatus

where transformers are also used to control the output of loudspeakers (Figure 6). Kim further discloses a sound reproducing system (Figure 6) comprising a first and second loudspeakers (speakers 30 and 32) including respective transformers having respective secondary windings (windings from leads 12A and B; and leads 14 A and B) and connected in parallel with each other, and a circuit for generating a mixed signal of a first loud speaker signal (12A and 14A) and a second loud speaker signal (12B and 14B) by connecting the secondary windings of the transformers of the first and second loud speakers in parallel with each other so that a center speaker signal (input to speaker 30) and a woofer signal (input to speaker 32) are generated. Kim teaches that the system has no appreciable energy losses or changes in frequency characteristics (Column 1, lines 53-56). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use transformers to control and produce a center and woofer signal with no appreciable energy loss for a higher fidelity audio signal.

Regarding Claim 4, Kim further discloses a sound reproducing system (Figure 6) comprising a first loud speaker and a second loud speaker (speakers 30 and 32), a transformer having primary side including two windings (windings from leads 14A and B) and a secondary side including one winding (right hand side of transformer 24B), the two windings of the primary side serving as transformer inputs of the first (input 14A) and second (input 14B) loud speakers respectively, the winding of the secondary side serving as a mixed signal output of first and second loud speaker signals.

Regarding Claim 3, Kanack Planning Corporation discloses an adapter as stated above apropos of claim 1 but does not disclose windings producing a mixed signal. IDS paper #6 discloses that the "translator" (i.e. transformer) is used to control the four loudspeakers associated with it. Kim also discloses an audio apparatus where transformers are also used to control the output of loudspeakers (Figure 6). Kim further discloses a sound reproducing system (Figure 6) comprising a first loud speaker and a second loud speaker (speakers 30 and 32), a transformer having primary side including two windings (windings from leads 14A and B) and a secondary side including one winding (right hand side of transformer 24B), the two windings of the primary side serving as transformer inputs of the first (input 14A) and second (input 14B) loud speakers respectively, the winding of the secondary side serving as a mixed signal output of first and second loud speaker signals. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use transformers to control and produce signal with no appreciable energy loss for a higher fidelity audio signal.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 1-4 have been considered but are moot in view of the new ground(s) of rejection.

6. Regarding the applicant's arguments of the Kim reference, filed 3/10/2004, page 4, lines 8-14, the office respectfully disagrees with the applicant's assertion that Kim "merely discloses a multiple output transformer network for a high fidelity sound

reproducing system which has high frequency and low frequency speakers." The office respectfully disagrees since both Kanack Planning Corporation and Kim disclose transformer means for controlling the audio output of speakers.

**Conclusion**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (703)305-5598. The examiner can normally be reached on 8 Hours, 5 day/week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Isen can be reached on (703)305-4386. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM

  
**XU MEI**  
**PRIMARY EXAMINER**